

SEQUENCE LISTING

<110> JOHNSTON, STEPHEN
QU, BA0-XI

<120> RATIONALLY DESIGNED AND CHEMICALLY SYNTHESIZED
PROMOTER FOR GENETIC VACCINE AND GENE THERAPY

<130> UTSD:788US

<140> UNKNOWN
<141> 2004-02-18

<150> 60/448,166
<151> 2003-02-18

<160> 37

<170> PatentIn Ver. 2.1

<210> 1
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1
cggtagatga tgttctcgat gcaatatcac gtgaagggtca aaaatagggtc a 51

<210> 2
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 2
aggtagcctc tctcgggt 18

<210> 3
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 3
atcaaataag agtgtaggga cgggagaggg ggaaaacaga acagaacagt gctgacgtca 60

<210> 4
 <211> 11
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 4
 gcaggcagtt g 11

 <210> 5
 <211> 41
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 5
 ccctttgaaa acgttaacgt taacgttcag ctgcagctgc a 41

 <210> 6
 <211> 9
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 6
 gctgattaa 9

 <210> 7
 <211> 13
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 7
 taattacagc caa 13

 <210> 8
 <211> 36
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 8

aggcgccaaa ggcaacgtta tatgcaaata tgcaaa

36

<210> 9

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 9

tgagaacagg gggggggggc gg

22

<210> 10

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 10

acatcggttc aacgtttctg gtttcaattt ctcttct

37

<210> 11

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 11

attaataatt accgttgcc attagcca

28

<210> 12

<211> 8

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 12 tatccaat	8
<210> 13 <211> 8 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 13 ggggcggg	8
<210> 14 <211> 11 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 14 atttgacgtc a	11
<210> 15 <211> 8 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 15 ataatgac	8
<210> 16 <211> 6 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 16 gccaat	6

<210> 17
 <211> 11
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 17
 agggactttc c 11

 <210> 18
 <211> 7
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 18
 gactcac 7

 <210> 19
 <211> 9
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 19
 ggggatttc 9

 <210> 20
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 20
 caacgttttg gttgacgaa 19

 <210> 21
 <211> 8
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 21
 atgggcgg 8

<210> 22
 <211> 13
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 22
 tgtaaataac ata 13

<210> 23
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 23
 ggaaaactga ctca 14

<210> 24
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 24
 caaaggaga agtga 15

<210> 25
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 25

aagtgggact ttcc 14

<210> 26

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 26

aaagggcgg 9

<210> 27

<211> 5

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 27

ccaat 5

<210> 28

<211> 11

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 28

tgtgggcggg g 11

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 29

ccaccggtgt tcctgaagg cgcc 24

<210> 30

<211> 7

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 30
 tatataa 7

 <210> 31
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 31
 gggggggcg ggcggttcgt cctcattc 28

 <210> 32
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 32
 tggaccgcgt ccgccccgcg 20

 <210> 33
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 33
 agcagacgtg 10

 <210> 34
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic

Primer

<400> 34
gagctctcag tctcagcgat caa

23

<210> 35
<211> 190
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 35
aaatgacata ggaaaactga ctcacaaagg gagaagtga agtgggactt tccaaagggc 60
ggccaattgt gggcggggcc accggtgttc ctgaagggcg cctatataag ggggggaggc 120
cgcgttcgtc ctcatcttgg accgcgtccg cccgcgagc agacgtggag ctctcagtct 180
cagcgatcaa 190

<210> 36
<211> 614
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 36
cggtacatga tggtctcgat gcaatatcac gtgaagggtca aaaatagggtc aagggtcacct 60
ctctcggcta tcaataaga gtgtagggac gggagagggg gaaaacagaa cagaacagtg 120
ctgacgtcag caggcagttg ccctttgaaa acgttaacgt taacgttcag ctgcagctgc 180
agctgattaa taattacagc caaaggcgcc aaaggcaacg ttatatgcaa atatgcaaat 240
gagaacaggg gggggggggcg gacatcggtt caacgtttct ggtttcaatt tctcttctat 300
taataattac cgttggccat tagccatata caatggggcg ggatttgacg tcaataatga 360
cgccaatagg gactttccga ctcacgggga tttccaacgt tttggttgac gaaatgggag 420
gtgtaaatga cataggaaaa ctgactcaca aaggggagaag tgaaagtggg actttccaaa 480
gggcggccaa ttgtggggcg ggccaccggt gttcctgaag ggcgcctata taaggggggg 540
cgggcgcgtt cgtcctcatt ctggaccgag tccgccccgc gagcagacgt ggagctctca 600
gtctcagcga tcaa 614

<210> 37
<211> 596
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 37
cggtacatga tggtctcgat gcaatatcac gtgaagggtca aaaatagggtc aatcaaataa 60

gagtgtaggg	acgggagagg	gggaaaacag	aacagaacag	tgctgacgtc	agcaggcagt	120
tgccctttga	aaacgttaac	gttaacgttc	agctgcagct	gcagctgatt	aataattaca	180
gccaaaggcg	ccaaaggcaa	cgttatatgc	aaatatgcaa	atgagaacag	gggggggggg	240
cggacatcgg	ttcaacgttt	ctggtttcaa	tttctcttct	attaataatt	accgttggcc	300
attagccata	tccaatgggg	cgggatttga	cgtcaataat	gacgccata	gggactttcc	360
gactcacggg	gatttccaac	gttttggttg	acgaaatggg	cggtgtaaat	gacataggaa	420
aactgactca	caaagggaga	agtgaaagtg	ggactttcca	aagggcggcc	aattgtgggc	480
ggggccaccg	gtgttcctga	agggcgcta	tataaggggg	ggcgggcgcg	ttcgtcctca	540
ttctggaccg	cgtcgcggcc	gcgagcagac	gtggagctct	cagtctcagc	gatcaa	596